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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/069,177 | 07/02/2002 | Daniel Hosten | KSN0023 | 7556 |
| 27187 | 7590 | 10/06/2003 | EXAMINER | |
| BAKER & DANIELS 205 W. JEFFERSON BOULEVARD SUITE 250 SOUTH BEND, IN 46601 | | | NICOLAS, WESLEY A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/069,177

Applicant(s)

HOSTEN ET AL.

Examiner

Wesley A. Nicolas

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8-11 are rejected because they provide for the use of "the arrangement", but, since the claim does not set forth any steps involved in the method/process (because said claims are dependent from an apparatus claim), it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

It is advised that Applicant amend the claims to method claims (*i.e.* "A method of...") including all the limitations set forth in any intervening claims and the independent claim.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the size and the number of the filter pores" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 12, 13, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Reynolds (U.S. 5,597,460).

Claim 1 is rejected because Reynolds teaches an arrangement enabling a liquid to flow evenly around a surface of a sample, said arrangement comprising:

- a flow chamber having said liquid flowing therethrough (Fig. 1, numeral 10);
- a sample located at least in part in said flow chamber and rotatable about an axis of rotation by means of a rotary drive (col. 5, lines 1-15);
- inflow and outflow pipes each exiting to opposite ends of the flow chamber from inflow and outflow containers, respectively (Fig. 1, numerals 44 and 30 where numeral 30 obtains fluid from just below numeral 20 at the weir);
- an inflow tube terminating in the inflow container (Fig. 1, numeral 38);
- an outflow tube beginning in the outflow container (Fig. 1, numeral 38);
- a flow generator (Fig. 1, numeral 34);
- filters arranged in the inflow and/or outflow container or in the inflow and outflow pipes, respectively, and having the liquid flowing therethrough (Fig. 1, numeral 36);
- wherein the inflow and outflow pipes extend in opposite ends of the flow chamber and the outflow tube begins in the outflow container (Fig. 1, numeral 30 and Fig. 1,

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numerals 44 and 30 where numeral 30 obtains fluid from just below numeral 20 at the weir).

Claim 3 is rejected because Reynolds teaches of electrodepositing material on the surface of the sample, comprising an electrode in the flow chamber (Fig. 1, numeral 26), wherein the liquid is an electrolyte (Fig. 1, numeral 12) and wherein the sample and the electrode are connected to a constant current source (col. 5, lines 53-60).

Claim 12 is rejected because Reynolds teaches an arrangement enabling a liquid to flow evenly around a surface of a sample, said arrangement comprising:

- a flow chamber profiled for allowing liquid to flow therethrough (Fig. 1, numeral 10);
- a rotary drive mechanism having a sample mounting surface profiled relative to said flow chamber whereby a sample can be located at least in part in said flow chamber and rotatable about an axis of rotation by said rotary drive mechanism (col. 5, lines 1-15);
- an inflow manifold and an outflow manifold positioned on opposite ends of said flow chamber (Fig. 1, numerals 44 and 30 where numeral 30 obtains fluid from just below numeral 20 at the weir);
- each manifold having flow tubes extending from said respective manifold and into said flow chamber (Fig. 1, numeral 38), said manifolds and said flow tubes defining a laminar flow pattern through said flow chamber (col. 6, lines 36-46).

Claim 13 is rejected because Reynolds teaches of filters arranged in the inflow and/or outflow container or in the inflow and outflow pipes, respectively, and having the liquid flowing therethrough (col. 5, lines 16-28).

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Claim 15 is rejected because Reynolds teaches of electrodepositing material on the surface of the sample, comprising an electrode in the flow chamber (Fig. 1, numeral 26), wherein the liquid is an electrolyte (Fig. 1, numeral 12) and wherein the sample and the electrode are connected to a constant current source (col. 5, lines 53-60).

Claim 17 is rejected because Reynolds teaches that the electrode has a grid basket of electrochemically inert material that is filled with the material to be deposited in granular form and has a planar surface containing holes (Fig. 2, numeral 26).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (U.S. 5,597,460) as applied to claim 12 above, and further in view of Haydu et al. (U.S. 6,024,856).

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Reynolds are as applied, argued, and disclosed above and incorporated herein but fail to specifically teach an electrode that consists of a planar surface coated with platinum or other noble metal.

Haydu et al. teach of an electrode that consists of a planar surface coated with platinum or other noble metal (col. 4, lines 35-53).

Claim 18 is rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified Reynolds to use an electrode which consists of a planar surface coated with platinum or other noble metal as taught by Haydu et al. because Haydu et al. teach that an electrode that has a planar surface coated with platinum or other noble metal is more long lasting and minimizes dissolution increasing overall service life (col. 4, lines 35-53).

Allowable Subject Matter

9. Claims 2, 4, 7, 14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2 and 14, the specific feature of having a varying size and number of pores across the overall filter area such that there is a pressure differential between the inflow/outflow pipes was not taught or suggested by the prior art of record.

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Regarding claims 4 and 16, the specific configuration of the flow chamber in relation to the sample and its axis of rotation was not taught or suggested by the prior art of record.

Regarding claim 7, the specific use of a throttle valve and the supply container having a means for filtering as well as regulating the pH value and filling level were not taught or suggested by the prior art of record.

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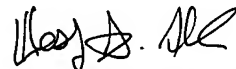
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (703)305-0082. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Roy King whose telephone number is (703) 308-1146.

The fax number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.


WESLEY A. NICOLAS
PATENT EXAMINER

September 29, 2003